ANALYST: VPDES NO

Parameter : Total Residual Chlorine
Method: Iodometric Direct
04/01

18th EDITION OF STANDARD METHODS-4500-CL B
EPA METHODS FOR CHEMICAL ANALYSIS-330.3

		Y	N
1)	Is sodium thiosulfate or PAO normality 0.01N, 0.025N or 0.00564N? [SM-2.d; 330.3-5.12]		
2)	Is sodium thiosulfate standardized daily? [SM-2.d]		
3)	Is iodine titrant standardized daily? [SM-2.g; Permit]		
4)	Is standardization documented? [Permit]		
5)	Is iodine titrant stored in an amber bottle or in the dark and kept from contact with rubber? [SM-2.g; 330.3-5.10]		
6)	Are reagents free of contamination or growths? [Permit]		
7)	Are reagents within their indicated shelf lives? [Permit]		
8)	Is sample volume appropriate for titrant normality? (500 mL- 0.01N or 0.025N, 200 ML - 0.00564N) [SM-3.a; 330.3-6.4]		
9)	Is pH adjusted to between 3.0 and 4.0 using acetic acid? [SM-3.a; 330.3-6.2]		
10)	Is KI added? [SM-3.b; 330.3-6.3]		
11)	Is titration done away from direct sunlight? [SM-3.c; 330.3-6.6]		
12)	Is at least 1 mL of starch solution added after yellow color is almost discharged? [SM-3.c; 330.3-6.6]		
13)	Is titrant added until blue color is discharged? [SM-3.c; 330.3-6.6]		
14)	Is blank run at least daily? [SM-3.d; 330.3-6.7]		
15)	Is sample value calculated correctly? [SM-4; 330.3-7]		
	$TRC (mg/L) = \frac{(A + B) \times N \times 35,450}{mL \text{ sample}}$		
	A = mL titration for sample B = mL titration for blank (positive or negative) N = normality of sodium thiosulfate or PAO		

PROBLEMS: